

Extruded Aluminum Sand Louver in 4" thick frame design Model GEL-35

Features – Vision proof design. Vertical blade designed for removal of dust particles, also provides a unit with low pressure drop and architecturally styled design for pleasing appearance. Louver construction conforms with SMACNA standards 5.1 and 5.2.

STANDARD CONSTRUCTION MATERIAL – EXTRUDED ALUMINUM 6063-T5

FRAME

4" thick, .081" thk. Extruded aluminum 6063-T5

BLADES

.063" thk. Extruded aluminum 6063-T5

MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

MAXIMUM SINGLE SECTION

120"W x 96"H or 96"W x 120"H (allows for best handling)
(Type of finish required may limit max. single section size)

MULLIONS

Visible

MINIMUM SIZE

12"W x 12"H

UNDERSIZED

1/4" under ordered size unless specified Exact or Actual

SCREEN

3/4" x .050 expanded aluminum screen no frame

FINISH

Mill

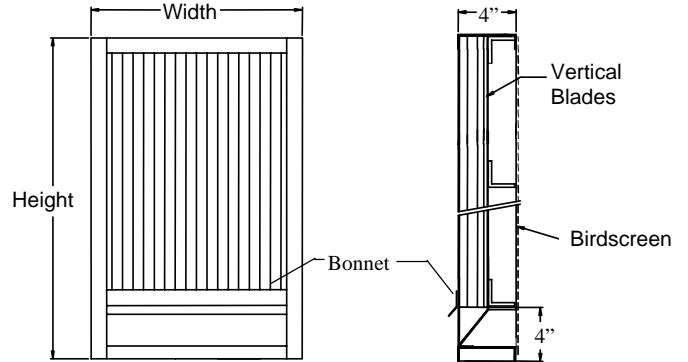
OPTIONAL CONSTRUCTION

SCREENS – Many styles available please consult screen listing

FINISH – Air dry primer, polyurethane, epoxy, or enamel, Baked epoxy or enamel. Anodized or Kynar. Powder coat.

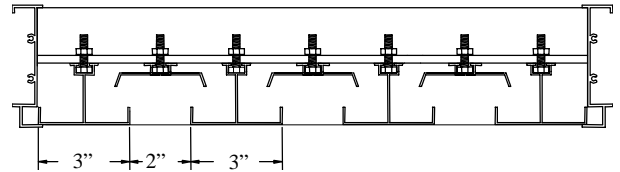
SPECIAL PURPOSE CONSTRUCTION

- Fully welded assembly
- Security bars
- Filter racks
- Hinged as walk through door or swing out access
- Sleeved for ductwork connection



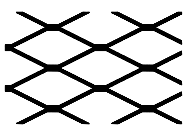
Front Elevation

Vertical Section

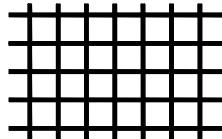


Horizontal Section

TYPICAL SCREEN STYLES



Expanded Aluminum
Standard



Wire Mesh

SAND REMOVAL EFFICIENCY

Velocity FPM /FA	Sand Removal Efficiency, Percentage
450	50%
400	58%
350	65%
300	70%
250	78%
200	85%
150	95%
100	100%

Test dust coarse 140-200 micron size

PERFORMANCE

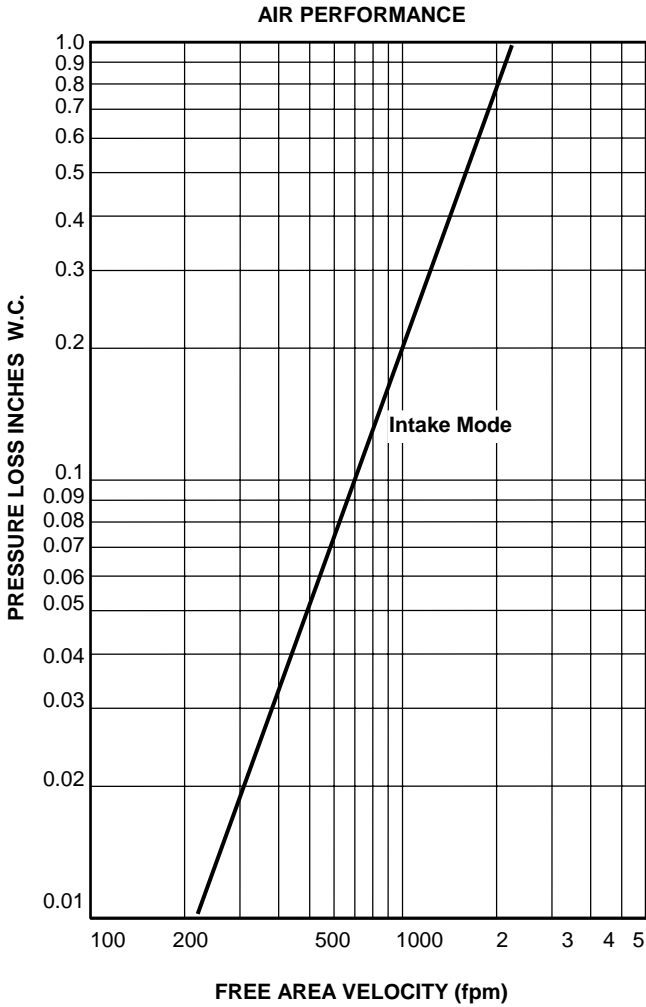
Max. Recommended
Velocity
760
(free area velocity)

Free Area
(48 x 48 section)
31%

Max. Pressure Drop
.15" w.g.

DATE	ARCHITECT / ENGINEER			CUSTOMER
PROJECT				
ITEM	QTY	W	H	DESCRIPTION

All tests performed at an independent laboratory based on AMCA 500 for air performance & ASHRAE Standard 52-76 for Sand Removal.



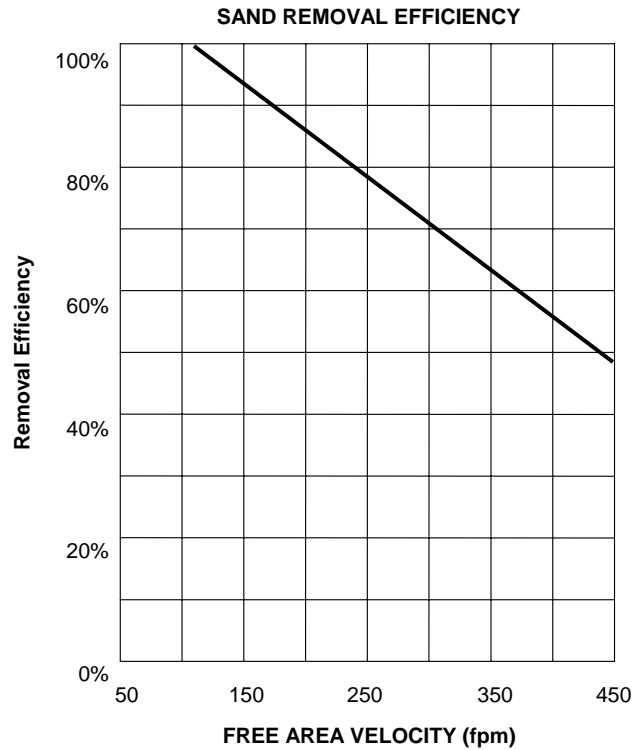
CALCULATING PRESSURE LOSS

Based upon a given flow rate (in CFM), the flowing pressure loss may be determined from the "air performance graph", knowing the sq. ft. of free area of the louver. Alternately, the free area may be determined based upon a volumetric flow rate and a maximum pressure loss. Utilizing the "air performance" graph.

_____ in. W.C. Max. Pressure Loss Intake or Exhaust

_____ FPM (Free Area Velocity From "Air Performance" Graph)

_____ CFM / _____ FPM Free Area Velocity = _____ Sq. Ft. Free Area



FREE AREA CALCULATIONS IN SQ. FT.

		WIDTH																		
		12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
HEIGHT	12	0.20	0.34	0.47	0.61	0.74	0.88	0.80	1.15	1.28	1.42	1.56	1.69	1.83	1.96	2.10	2.23	2.37	2.50	2.64
	18	0.37	0.63	0.88	1.13	1.38	1.63	1.49	2.13	2.39	2.64	2.89	3.14	3.39	3.64	3.89	4.14	4.40	4.65	4.90
	24	0.55	0.92	1.28	1.65	2.02	2.38	2.17	3.12	3.49	3.85	4.22	4.59	4.96	5.32	5.69	6.06	6.43	6.79	7.16
	30	0.72	1.20	1.69	2.17	2.65	3.14	2.86	4.10	4.59	5.07	5.55	6.04	6.52	7.00	7.49	7.97	8.45	8.94	9.42
	36	0.89	1.49	2.09	2.69	3.29	3.89	3.55	5.09	5.69	6.29	6.89	7.49	8.09	8.69	9.28	9.88	10.48	11.08	11.68
	42	1.07	1.78	2.50	3.21	3.93	4.64	4.23	6.07	6.79	7.51	8.22	8.94	9.65	10.37	11.08	11.80	12.51	13.23	13.94
	48	1.24	2.07	2.90	3.73	4.57	5.40	4.92	7.06	7.89	8.72	9.55	10.38	11.22	12.05	12.88	13.71	14.54	15.37	16.20
	54	1.41	2.36	3.31	4.26	5.20	6.15	5.60	8.04	8.99	9.94	10.89	11.83	12.78	13.73	14.68	15.62	16.57	17.52	18.47
	60	1.59	2.65	3.71	4.78	5.84	6.90	6.29	9.03	10.09	11.16	12.22	13.28	14.35	15.41	16.47	17.54	18.60	19.66	20.73
	66	1.76	2.94	4.12	5.30	6.48	7.66	6.98	10.01	11.19	12.37	13.55	14.73	15.91	17.09	18.27	19.45	20.63	21.81	22.99
	72	1.93	3.23	4.52	5.82	7.11	8.41	7.66	11.00	12.29	13.59	14.89	16.18	17.48	18.77	20.07	21.36	22.66	23.95	25.25
	78	2.11	3.52	4.93	6.34	7.75	9.16	8.35	11.98	13.40	14.81	16.22	17.63	19.04	20.45	21.86	23.28	24.69	26.10	27.51
84	2.28	3.81	5.33	6.86	8.39	9.91	9.03	12.97	14.50	16.02	17.55	19.08	20.61	22.13	23.66	25.19	26.72	28.24	29.77	
90	2.45	4.09	5.74	7.38	9.02	10.67	9.72	13.95	15.60	17.24	18.88	20.53	22.17	23.81	25.46	27.10	28.74	30.39	32.03	
96	2.62	4.38	6.14	7.90	9.66	11.42	10.41	14.94	16.70	18.46	20.22	21.98	23.74	25.50	27.26	29.01	30.77	32.53	34.29	
102	2.80	4.67	6.55	8.42	10.30	12.17	11.09	15.92	17.80	19.68	21.55	23.43	25.30	27.18	29.05	30.93	32.80	34.68	36.55	
108	2.97	4.96	6.95	8.94	10.94	12.93	11.78	16.91	18.90	20.89	22.88	24.88	26.87	28.86	30.85	32.84	34.83	36.82	38.81	
114	3.14	5.25	7.36	9.47	11.57	13.68	12.46	17.89	20.00	22.11	24.22	26.32	28.43	30.54	32.65	34.75	36.86	38.97	41.08	
120	3.32	5.54	7.76	9.99	12.21	14.43	13.15	18.88	21.10	23.33	25.55	27.77	30.00	32.22	34.44	36.67	38.89	41.11	43.34	